State of Louisiana

Coastal Protection and Restoration Authority of Louisiana (CPRA)

2012/2013 Annual Inspection Report

for

GIWW BANK STABILIZATION PROJECT (PERRY RIDGE TO TEXAS (CS-30)

State Project Number CS-30
Priority Project List 9

June 13, 2013
Calcasieu Parish

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I. Introduction

The GIWW Bank Stabilization (Perry Ridge to Texas) Project (CS-30) is located in the Calcasieu-Sabine Basin on the northern bank of the Gulf Intracoastal Waterway in Calcasieu Parish. The 1,132 acre project area extends from the Perry Ridge on the northern shore of the GIWW westward to the Sabine River. (See Appendix A).

The GIWW Bank Stabilization (Perry Ridge to Texas) Project (CS-30) was authorized by Section 303(a) of Title III Public Law 101-646, the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) enacted on November 29, 1990 as amended and approved on the ninth Priority Project List. The GIWW Bank Stabilization (Perry Ridge to Texas) Project has a twenty–year (20 year) project life, which began in July 2002.

II. Project Description and History

The GIWW Bank Stabilization (Perry Ridge to Texas) Project encompasses 1,132 acres and is bounded on the south by the Gulf Intracoastal Waterway (GIWW), on the east by Perry Ridge, on the west by Conway Bayou and the Sabine River, and on the north by a pipeline canal (Attachment II). The project involves the installation and maintenance of approximately 22,952 linear feet of terrace vegetated with California bulrush plants located in shallow water areas north of the GIWW and 10,705 linear feet of foreshore rock dike on the northern bank of the GIWW from Perry Ridge heading westward to the Sabine River and then along the eastern bank of the Sabine River beginning at its intersection with the GIWW and heading north.

The Project has twenty-year (20 year) economic life, which began in July 2002.

The principal project features include:

- Site 1 - Foreshore Rock Dike (approximately 10,705 linear feet)
- Site 2 – Earthen Terraces with vegetative plantings

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the GIWW Bank Stabilization (Perry Ridge to Texas) Project (CS-30) is to evaluate the constructed project features and identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. Should it be determined that corrective actions are needed, CPRA shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan, 2002). The annual inspection report also contains a summary of maintenance projects which were completed since completion of constructed project features and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A
summary of past operation and maintenance projects completed since completion of the GIWW Bank Stabilization (Perry Ridge to Texas) Project (CS-30) are outlined in Section IV.

An annual O & M inspection of the GIWW Bank Stabilization (Perry Ridge to Texas) Project (CS-30) was held on June 13, 2013 at approximately 11:40am under sunny skies and warm temperatures. In attendance were Mel Guidry, Stan Aucoin, and Darrell Pontiff of CPRA, along with Frank Chapman and Brandon Samson of NRCS, and Josh Carson for other inspections. The inspection began on the eastern end of the project.

The field inspection included a complete visual inspection on the rock dike. The terraces were not inspected during this site visit. Staff gauge readings and existing benchmarks were not available to be used to determine approximate water elevation and existing elevation of the foreshore rock dike and earthen terraces. Photographs were taken at each project feature (see Appendix B) and field inspection notes were compiled to record measurement and deficiencies (Appendix D).

IV. Summary of Past Operation and Maintenance Projects

General Maintenance: Below is a summary of completed maintenance projects and operation tasks performed since July 2002, the construction completion date of the GIWW Bank Stabilization Project Perry Ridge to Texas (CS-30).

No maintenance has been required on this project.

Structure Operations: There are no active operations associated with this project.

V. Inspection Results

Site 1—Foreshore rock dike

The dike is in very good condition. (Appendix B, Photo 1) As noted on prior inspections, there is one section of the dike where rock has been displaced by a barge. The condition has not changed and will continue to be monitored. (Appendix B, Photo 2) A second location was noted where it appears rock has been moved creating a 7 foot gap in the rock dike (Lat/Long N30° 03’ 34”, W93° 41’ 16”). A breach has formed in the 320’ earthen plug located behind the foreshore rock dike. Water is channeling through the breach in the earthen plug into the marsh creating a fairly substantial current behind the dike. (Appendix B, Photo 3-4).

Site 2—Earthen Terraces with vegetative plantings

The earthen terraces and vegetative plantings were not inspected during this trip. In concurrence with the federal sponsor it was decided the terrace field is in stable condition after several years post construction. Due to logistics/coordination involved with setting up the inspection as well as the stability of the terraces thus far, it was decided that an inspection
was not required every year. The earthen terraces will be inspected in 2013-2014 cycle of annual inspections.

VI. Conclusions and Recommendations

Overall, the Perry Ridge West Bank Stabilization Project is in very good condition and functioning as designed. A maintenance event to address the breach in the earthen plug has been initiated by CPRA. Lonnie Harper & Associates Inc. has completed the surveying and engineering services necessary to prepare a final design report for the proposed repair of the breach. Incremental funding to address the breach will be requested at the October 10, 2013 CWPPRA Task Force Meeting.
Appendix A

Project Features Map
Appendix B

Photographs
Annual Inspection Report
PERRY RIDGE WEST BANK STABILIZATION
State Project No. CS-30

Photo No. 1, Typical Rock Dike

Photo No. 2, Low Area of Displaced Rock Dike
Photo No. 3, Gap in Earthen Plug behind Rock Dike, Water Flow Channeling into Marsh

Photo No. 4, Water Flow through Displaced Rock Dike, Water Flow Channeling into Marsh
Appendix C
Three Year Budget Projection
### GIWW-PERRY RIDGE BANK STABILIZATION/ CS-30 /PPL 9
Three-Year Operations & Maintenance Budgets  07/01/2013 - 06/30/2016

<table>
<thead>
<tr>
<th></th>
<th>2013/2014 (-12)</th>
<th>2014/2015 (-13)</th>
<th>2015/2016 (-14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Inspection</td>
<td>$6,457.00</td>
<td>$6,651.00</td>
<td>$6,851.00</td>
</tr>
<tr>
<td>Structure Operation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Administration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Administration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance/Rehabilitation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### 13/14 Description:

**E&D**
- Construction
- Construction Oversight

Sub Total - Maint. And Rehab. $ -

#### 14/15 Description:

**E&D**
- Construction
- Construction Oversight

Sub Total - Maint. And Rehab. $ -

#### 15/16 Description:

**E&D**
- Construction
- Construction Oversight

Sub Total - Maint. And Rehab. $ -

<table>
<thead>
<tr>
<th>Total O&amp;M Budgets</th>
<th>2013/2014 (-12)</th>
<th>2014/2015 (-13)</th>
<th>2015/2016 (-14)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$6,457.00</td>
<td>$6,651.00</td>
<td>$6,851.00</td>
</tr>
</tbody>
</table>

**O & M Budget (3 yr Total)** $19,959.00  
**Unexpended O & M Budget** $18,374.00  
**Remaining O & M Budget (Projected)** $(1,585.00)

Note: Incremental funding will be requested at the Sept. TC Mtg.
Appendix D

Field Inspection Form
**MAINTENANCE INSPECTION REPORT CHECK SHEET**

<table>
<thead>
<tr>
<th>Item</th>
<th>Condition</th>
<th>Physical Damage</th>
<th>Corrosion</th>
<th>Photo #</th>
<th>Observations and Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel Bulkhead</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel Grating</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stop Logs</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardware</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timber Piles</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timber Wales</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Galv. Pile Caps</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cables</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signage /Supports</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rip Rap (fill) (foreshore dike)</td>
<td>Good</td>
<td></td>
<td></td>
<td>1-2</td>
<td>Dike in good condition. Low area where it appears a barge has displaced the rock.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3-4</td>
<td>Seven foot gap in rock dike. Cut in Earthen Plug behind dike.</td>
</tr>
<tr>
<td>Earthen Terraces</td>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td>Survey of location complete at this location. N 30° 03' 34.0&quot; W 93° 41' 16.2&quot;</td>
</tr>
<tr>
<td>Vegetative Plantings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not inspected on this trip.</td>
</tr>
</tbody>
</table>

What are the conditions of the existing levees?
Are there any noticeable breaches?
Settlement of rock plugs and rock weirs?
Position of stoplogs at the time of the inspection?
Are there any signs of vandalism?